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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/593,761	06/14/2000	YUTAKA YANO	169078/99	8044
466	7590	07/01/2004	EXAMINER	
YOUNG & THOMPSON 745 SOUTH 23RD STREET 2ND FLOOR ARLINGTON, VA 22202			PHAN, HANH	
			ART UNIT	PAPER NUMBER
			2633	9
DATE MAILED: 07/01/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/593,761

Applicant(s)

YANO, YUTAKA

Examiner

Hanh Phan

Art Unit

2633

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2000.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 14-19 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-4, 14, 18 and 19 is/are rejected.  
7) ☒ Claim(s) 5-8 and 15-17 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. This Office Action is responsive to the Amendment filed on 04/15/2004.
2. In claim 14, the phrase "a dummy data generating circuit for mutually differing dummy data patterns" should be changed to --a dummy data generating for generating mutually differing dummy data patterns--.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-8 and 14-19 are rejected under 35 U.S.C. 112 first paragraph because claims 1 and 14 are single means claims (MPEP 2164.08(a)).

A single means claim, i.e., where a means recitation does not appear in combination with another recited element of means, is subject to an undue breadth under 35 U.S.C. 112, first paragraph. In re Hyatt, 708 F.2d 712, 714-715, 218 USPQ 195, 197 (Fed. Cir. 1983)(A single means claim which covered every conceivable means for achieving the stated purpose was held nonenabling for the scope of the claim because the specification disclosed at most only those means known to the inventor).

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-4, 18 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Bosotti (US Patent No. 4,267,590).

Regarding claim 1, referring to figures 1-5, Bosotti teaches a wavelength-division multiplexed optical transmission system for transmitting an optical signal using frames via an optical fiber transmitting line, comprising:

a device (i.e., clock and phase shifters SF2-SFn, Fig. 1) for reducing mutual interference among a plurality of wavelength which are transmitted through a same optical fiber transmitting line (see col. 2, lines 2-53, col. 3, lines 6-67, col. 4, lines 1-30 and see abstract section).

Regarding claim 2, Bosotti further teaches a transmitter for converting an inputted electric signal into the optical signal and transmitting the optical signal and a receiver for receiving said transmitted optical signal (Figs. 1-5).

Regarding claim 3, Bosotti further teaches further comprising any one of:

a unit for mutually differing transmitting frame phases between at least two or more wavelength channels among a plurality of wavelength channels which are transmitted through a same optical fiber transmitting line (see col. 2, lines 2-53, col. 3, lines 6-67, col. 4, lines 1-30 and see abstract section).

unit for inserting mutually differing dummy data patterns which are different each other among the wavelength channels; and

a unit for scrambling said electric signals with mutually different scrambling patterns .

Regarding claim 4, Bosotti further teaches a frame phase updating unit for mutually differing transmitting frame phases between at least two or more wavelength channels among a plurality of wavelength channels which are transmitted through a same optical fiber transmitting line (see col. 2, lines 2-53, col. 3, lines 6-67, col. 4, lines 1-30 and see abstract section).

Regarding claim 18, Bosotti further teaches a device generating different transmitting frame phase of channels if at least two wavelength channels among a plurality of wavelength channels have the same phases (see col. 2, lines 2-53, col. 3, lines 6-67, col. 4, lines 1-30 and see abstract section).

Regarding claim 19, Bosotti further teaches a device generating random transmitting frame phase of channels if at least two wavelength channels among a plurality of wavelength channels have the same phases (see col. 2, lines 2-53, col. 3, lines 6-67, col. 4, lines 1-30 and see abstract section).

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bosotti (US Patent No. 4,267,590).

Regarding claim 14, it would have been obvious to obtain a dummy data generating circuit in order to maintain correlation of the data pattern between the channels to secure stable transmission quality.

#### ***Allowable Subject Matter***

9. Claims 5-8 and 15-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims and overcome the 112 rejection above.

#### ***Response to Arguments***

10. Applicant's arguments with respect to claims 1-5 and 14-19 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Conclusion***

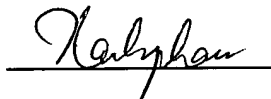
11 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Phan whose telephone number is (703)306-5840.

Application/Control Number: 09/593,761  
Art Unit: 2633

Page 6

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan, can be reached on (703)305-4729. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-4700.

A handwritten signature in cursive script, appearing to read 'Hanh Phan', is written over a horizontal line.

Hanh Phan

06/24/2004